

FIG 1: RESEARCH POSSIBILITIES FOR BIG BREAK MASTER PLANNING

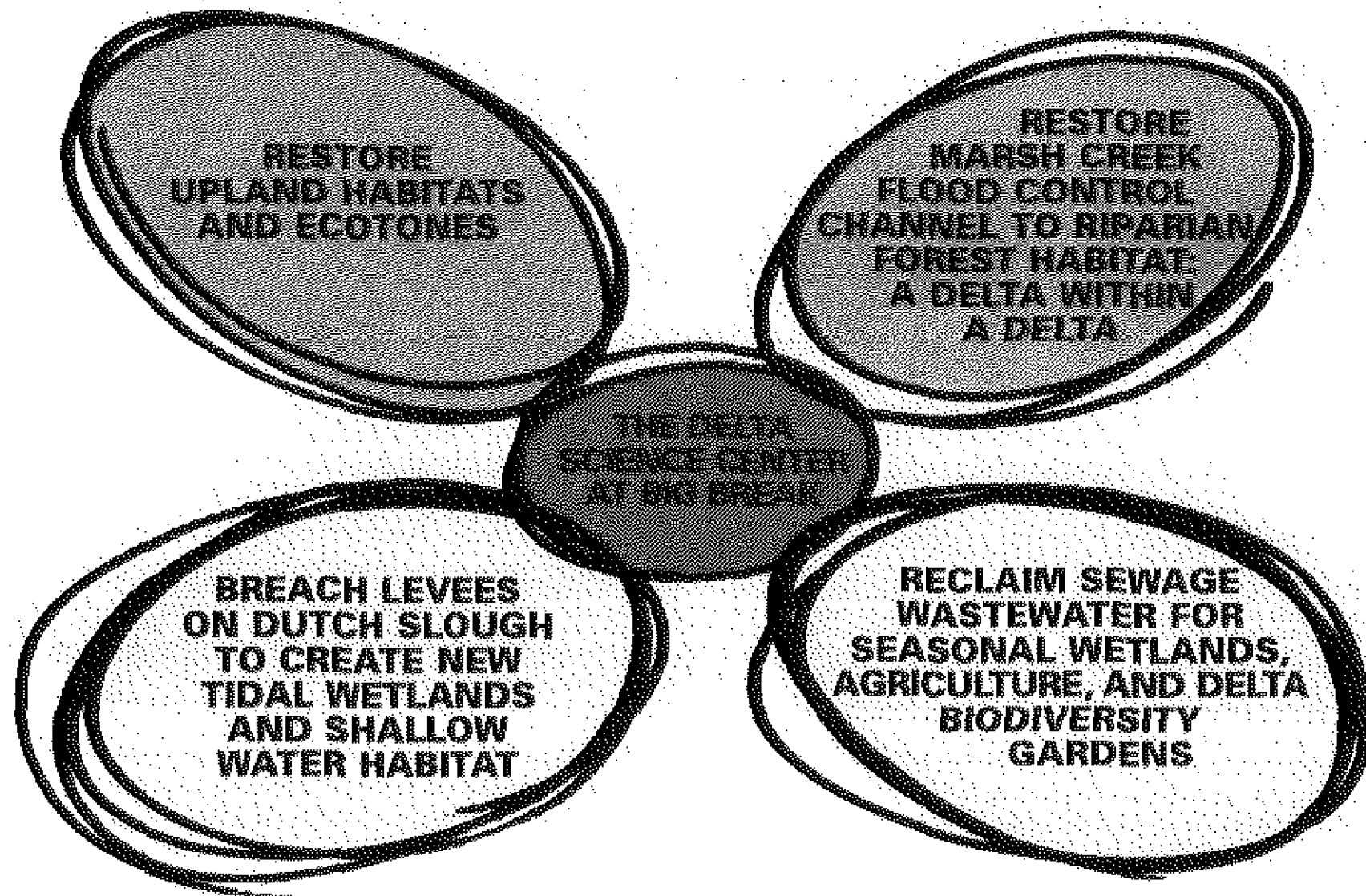


FIG 3a: RESTORATION POSSIBILITIES FOR BIG BREAK MASTER PLANNING

April 15, 1999


Joseph Canciamilla
Supervisor District 5
300 E. Leland Rd., Suite 100
Pittsburg, CA 94565

Dear Joe:

As a former Chairman and continued supporter of The Delta Science Center, we want you to know that we are pursuing two CALFED projects with which you are very familiar. One is the "Marsh Creek Watershed Science Program" and the other is "The Delta Science Center at Big Break: A Unique Opportunity for Restoration, Research and Education."

We look forward to your continued support on these projects and will keep you advised of their progress.

Sincerely,



Stephen Barbata
Executive Director

cc: Contra Costa County Planning Commission

THE DELTA
SCIENCE CENTER
At Big Break

April 15, 1999

Margit Aramburu, E.D.
Delta Protection Commission
P.O. Box 530
Walnut Grove, CA 95690

Dear Margit,

John Cain of the National Heritage Institute and I are pleased to bring to your attention that we are pursuing two CALFED projects with which you are very familiar. One is the "Marsh Creek Watershed Science Program" and the other is "The Delta Science Center at Big Break: A Unique Opportunity for Restoration, Research and Education."

We look forward to working with you on these projects.

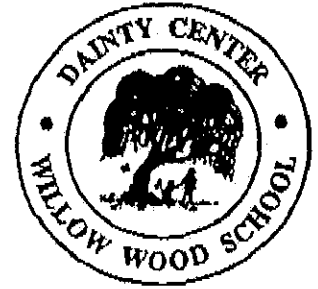
Sincerely,



Stephen Barbata
Executive Director

THE DELTA
SCIENCE CENTER
At Big Break

LETTERS OF SUPPORT



*"Train up a child in the way he should go; and
when he is old, he will not depart from it."*
PROVERBS 22:6

To: Steve Barbata
From: Shawn Guinn
Subj: Marsh Creek Watershed Science Program
Date: April 14, 1999

Dear Steve,

Thank you for sharing your Marsh Creek Watershed Program proposal with me at our recent meeting. As a long time politician, educator, and environmental activist for the Delta, I sincerely appreciate the efforts you are making to focus attention and resources on the Marsh Creek. By pulling all of the available resources together, I am confident that the detrimental effects of years of mismanagement can be reversed.

Our city has a council mandated creek and trail advisory committee that includes liaison members from a wide variety of community organizations including the regional primary and secondary school districts, Scouts, 4-H, Rotary, Soroptomist and the East Bay Regional Park district. We will put our resources behind your efforts with complete support. Together, I am confident we can make a significant difference.

Sincerely,

Shawn Guinn
Former Brentwood City Council Member
Owner/Director of Dainty Center/Willow Wood School
Chair: Brentwood Creek and Trail Advising Committee



ANTIOCH HIGH SCHOOL

700 West Eighteenth Street
Antioch, California 94509
(925) 706-5300
Fax (925) 706-1875

JEFF REICH
Principal
JIM HOLLINGSWORTH
Associate Principal

KATHLEEN CURRY
Vice Principal
ROGER HARTMAN
Vice Principal
GARY MCADAM
Vice Principal
FRANCES PARKER
Vice Principal

Stephen Barbata
Executive Director
Delta Science Center
96 Orchard Estates Drive
Walnut Creek, CA 94598
925-947-1473

April 1, 1999

Dear Mr. Barbata:

The Antioch High School Environmental Studies Academy would like very much to participate as a partner in the development of a Watershed Stewardship Program. We have read your current CALFED grant proposal and believe that the program you have described will provide a unique opportunity for our students to participate in a high quality, hands-on, community based, science program. We believe that community based environmental science programs must be an integral part of our science curriculum as they provide opportunities for our students to do "real science" and because they support our efforts to develop a "school-to career" program.

We support your efforts to expand the Delta Science Center's educational programs. Our students were very fortunate to have been given the opportunity to explore and learn about the Delta last year aboard the research ship, Superfish. This Delta Science Center program was an extraordinary opportunity for our students. The research that our students did before and after their delta journey required them to understand some of the real issues and constraints associated with resource management decisions. We are very familiar with the high quality educational programs that you have provided in the past and hope that success with this CALFED proposal will provide another opportunity for us to work together. We also appreciate your participation on Antioch High School's Environmental Studies Academy Advisory Committee. Your ability to pull many talented individuals from various organizations and agencies together facilitates program development at Antioch High School.

It is a logical next step to develop a Marsh Creek Watershed Stewardship Program as Marsh Creek is probably the last major creek in east Contra Costa County that has not been irreversibly degraded by urbanization. It is also a major creek that contributes to the San Joaquin River Delta System. It is essential that students understand the concept of watersheds such as the Marsh Creek Drainage Basin before they can fully understand our Delta ecosystem. Your desire to utilize Marsh Creek is a wise

choice. We have utilized a portion of West Antioch Creek as a site for our students over the past few years because of its close proximity to our high school campus. However, West Antioch Creek, like most, has been reduced to a muddy flood conveyance channel. Each year our creek floods, scouring it of all vegetation to be replaced with new alien weeds and grasses the following year. It is difficult for students to understand fresh water ecology under these conditions. It would be a major improvement for our students to be able to participate in monitoring and research projects at Marsh Creek and they would be providing our community a service by helping collect data on one of the last major creeks that still has a chance of being protected.

We hope you will be successful with your grant proposal as we would like to involve our students in the following way:

Field Trips

Students from our Environmental Science class will visit Marsh Creek several times during the year to collect data, both physical and biological. Students will be able to see changes, if any, due to seasons. The data will be imported into a data base that can be used for developing base lines as well as for future research projects. Students will be given opportunities to learn about the historical perspectives associated with Marsh Creek. The East Bay Regional Park District has people that are very qualified and capable of providing this service to our students. Students will research topics that may include how native Americans utilized and impacted the watershed, the history of cattle ranching and the impacts this agricultural practice has had on the Marsh Creek Watershed, and how growing urbanization has affected Marsh Creek as an ecosystem. Because our students are part of an Academy, they remain as a team during a portion of their school day. These trips to Marsh Creek will fit nicely into our integration of their English, History, and Science curriculum.

Internships

We are currently developing unpaid internships for our Senior students. We want to provide opportunities for these students to participate in projects that require a high degree of dedication and care. We believe that many projects can be developed at Marsh Creek for these dedicated students. We hope these students will be able to do long term monitoring and research projects and that the work they complete will benefit others by providing information necessary for future restoration projects. At the end of each semester these students will present their findings to a panel of community members like yourself, possibly to the Environmental Studies Academy Advisory Committee.

We are requesting that you include the following items in your grant proposal. We believe that funding for these items is essential if we are to participate fully in your program.

Transportation

The Delta Science Center will have to provide funding for buses so that students can be transported from Antioch High School to Marsh Creek. We will need one bus for each of the three field trips. The cost for each trip is approximately \$200.00

Substitutes

Two teachers, myself and Roger Macdonald (English/History) will have to travel with the students on each field trip. Funds will have to be made available to pay for our substitutes. Each substitute costs approximately \$100.00.

Permanent Field Test Sites

We believe that permanent field test sites will make the task of taking samples and performing data collection more beneficial and accurate. Example sites could include testing water chemistry, collecting aquatic insects, taking debris samples, sand pits for observing animal tracks, and perhaps a weather station.

Field Equipment

We can provide some equipment, however, certain supplies and materials will have to be purchased. This equipment should be stored at a central location so that it can be used by all groups that will participate in the watershed activities.

Again, we hope that you are successful and we look forward to continuing our work together. Please let us know at Antioch High School if we can be of any assistance.

Sincerely,



Jim Hybarger,
Environmental Science Teacher
Environmental Studies Academy
Antioch High School



LOS MEDANOS
COLLEGE

2700 East Leland Road
Pittsburg, CA 94565-5197
(510) 439-2181
FAX (510) 427-1599

April 13, 1999

Mr. Stephen Barbata
Executive Director
Delta Science Center

Dear Mr. Barbata:

I have had the opportunity to review the proposal to "Initiate a Watershed Science Program on Marsh Creek". The proposed project represents an excellent opportunity to extend and strengthen field study experiences in the life sciences for students and faculty from Los Medanos College and the entire Contra Costa Community College District. I am confident that district faculty will embrace the plan to further their collaboration with the various educational partners of the Delta Science Center at Big Break.

As you know, a member of the Los Medanos College biological sciences faculty was awarded a full-semester sabbatical leave during 1998-99 which focused primarily on acquiring scientific data on the Marsh Creek watershed to further curriculum development in environmental biology in collaboration with the Delta Science Center. Further, we have affirmed our commitment to searching out ways to partner with the DSC in order to develop an off-campus site for the study of wetlands and wildlife ecology. Securing funding for the Watershed Science Program would certainly move us much closer to realizing this goal.

I am pleased to confirm our enthusiastic support for the project.

Sincerely,

Daniel W. Henry
Dean of Planning, Research, & Professional Development

Contra Costa
Community College
District

Pittsburg High School

250 School Street
Pittsburg, California 94565
(925) 473-4100
Fax (925) 473-4183



Steve Barbata
Delta Science Center
86 Orchard Estates Dr.
Walnut Creek, CA 94598

13 April, 1999

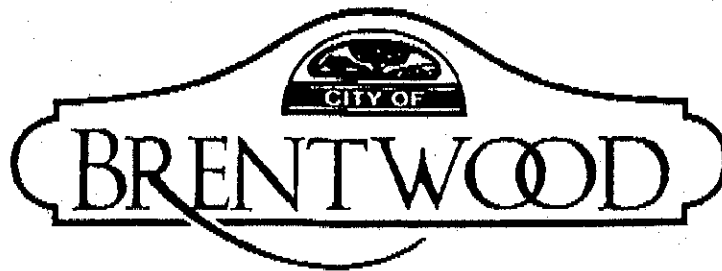
The Pittsburg High School science department is in strong support of the Watershed Science Program on Marsh Creek. As Chair of the science department I represent 14 science teachers who are desperately seeking ways to provide 'real life' experiential science to our students. As a recent Master's recipient in environmental education, a member of the Program committee for the Delta Science Center, and a current recipient of a Toyota Tapestry grant in science, I have reviewed extensive research on the academic and motivational value of experiential education and there is no question that this type of instruction is highly beneficial.

Unfortunately, the extreme financial and logistical difficulties with getting students into the field are overwhelming. The CALFED grant for the Watershed Science Program on Marsh Creek could provide the exact impetus needed to produce a powerful science experience for students at Pittsburg High School, as well as, initiate the important first steps in the proper stewardship of the Marsh Creek watershed.

Sincerely,

A handwritten signature in dark ink, appearing to read "Dan Hanel".

Dan Hanel
Science Dept. Chair
Pittsburg High School
250 School St.
Pittsburg, CA 94565



April 15, 1999

Stephen Barbata, Director
Delta Science Center
86 Orchard Estates Drive
Walnut Creek, CA 94598

SUBJECT: Marsh Creek Watershed Study Program

Dear Stephen:

We have reviewed your draft proposal for CALFED funds to create a Watershed Science Program on Marsh Creek. As Marsh Creek is the primary creek flowing through the City of Brentwood and has great value as an historic, ecological and recreational resource, we support the proposal.

Marsh Creek is the backbone of our City's open space and trail system and it truly is where our residents come together. By increasing the educational programs involving the creeks, it means a better informed community which in turn translates into a heightened level of attention to the creeks, water quality and the protection of the Marsh Creek watershed.

The City of Brentwood enthusiastically supports this effort. Please let us know what we can do to see this proposal translated into reality.

Sincerely,

A handwritten signature in dark ink, appearing to read "Jon Elam".

Jon Elam
City Manager

Signatory Agencies:

Alameda County

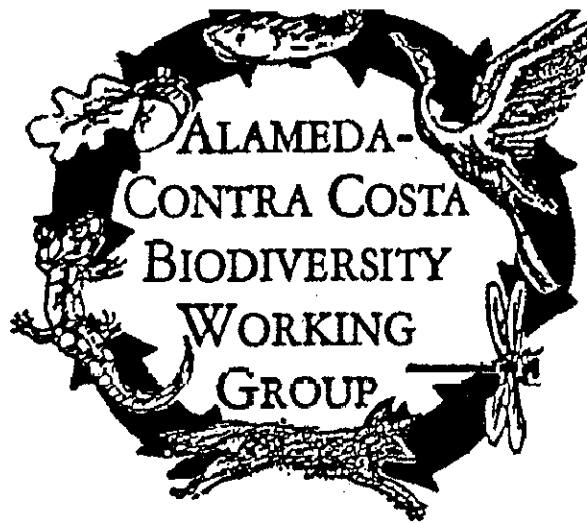
Contra Costa County

Contra Costa Water District

Department of Fish and Game

East Bay Regional Park District

East Bay Municipal Utility District



April 15, 1999

Mr. Stephen Barbata, Executive Director
Delta Science Center at Big Break
P.O. Box 1105
Oakley, CA 94561

Re: Delta Science Center Proposal for CALFED Funds to Initiate a Watershed Science Program on Marsh Creek

Dear Mr. Barbata:

The Steering Committee of the Alameda-Contra Costa Biodiversity Working Group ("BWG") supports the proposal made by the Delta Science Center to obtain funding from the CALFED Bay-Delta Program to support initiation of a Watershed Science Program on Marsh Creek in eastern Contra Costa County. The Steering Committee consists of staff from the six agencies which sponsor the BWG, including the following five agencies which are directly involved with BWG activities in eastern Alameda and Contra Costa County: Alameda County, the California Department of Fish and Game, Contra Costa County, the Contra Costa Water District, and the East Bay Regional Park District. The Delta Science Center's proposal for Marsh Creek could complement the on-going work of the BWG in this area, improving the base of natural resource information and public involvement in this portion of Contra Costa County by contributing a hydrological perspective distinct from the biology-focused issues being addressed via the BWG.


The BWG Steering Committee has initiated a study of biological resources and land use in a 227,000 acre area of eastern Alameda and Contra Costa Counties, including the entire upper watershed of Marsh Creek. To ensure that this effort benefits from thorough public involvement, the Steering Committee has convened a Task Force with broad representation of agency (local, state, and federal), environmental, agricultural, developer, and community interests to complete this study by consensus. The study will include technical information, possibly including data on vegetation types, key habitat features, species sightings, and proposed land uses. Perhaps more important, the study will also include pragmatic, politically-viable consensus recommendations for improving the process of conserving biological resources. The Marsh Creek Watershed Science Program proposed by the Delta Science Center could benefit the BWG effort by providing another source of public involvement in natural resource issues as well as valuable technical information on water quality,

Mr. Stephen Barbata
April 15, 1999
Page 2 of 2

aquatic biological resources, channel form, and other relevant subjects. Presumably, the BWG study and public process could present similar benefits to the Watershed Science effort. Recognizing these potential mutual benefits, as well as the potential for the Watershed Science Program to contribute to the identification and enhancement of the biological resources of the San Francisco Bay-Delta, the Steering Committee supports the Delta Science Center's Marsh Creek proposal to CALFED.

Should you have any questions on this letter or on the activities of the Alameda-Contra Costa County Biodiversity Working Group, please feel free to call me at (925) 335-1227.

Sincerely,



John Kopchik, Steering Committee Member
Planner, Contra Costa County Community Development Department

j:kopc\john-old\bddscsup.let

NONDISCRIMINATION COMPLIANCE STATEMENT

STD. 19 (REV. 3-95) FMC

COMPANY NAME

THE DELTA SCIENCE CENTER at Big Break

The company named above (hereinafter referred to as "prospective contractor") hereby certifies, unless specifically exempted, compliance with Government Code Section 12990 (a-f) and California Code of Regulations, Title 2, Division 4, Chapter 5 in matters relating to reporting requirements and the development, implementation and maintenance of a Nondiscrimination Program. Prospective contractor agrees not to unlawfully discriminate, harass or allow harassment against any employee or applicant for employment because of sex, race, color, ancestry, religious creed, national origin, disability (including HIV and AIDS), medical condition (cancer), age, marital status, denial of family and medical care leave and denial of pregnancy disability leave.

CERTIFICATION

I, the official named below, hereby swear that I am duly authorized to legally bind the prospective contractor to the above described certification. I am fully aware that this certification, executed on the date and in the county below, is made under penalty of perjury under the laws of the State of California.

OFFICIAL'S NAME

Stephen Barbata

DATE EXECUTED

April 15, 1999

EXECUTED IN THE COUNTY OF

Contra Costa

PROSPECTIVE CONTRACTOR'S SIGNATURE

PROSPECTIVE CONTRACTOR'S TITLE

Executive Director

PROSPECTIVE CONTRACTOR'S LEGAL BUSINESS NAME

THE DELTA SCIENCE CENTER at Big Break

**STANDARD CLAUSES --
SMALL BUSINESS PREFERENCE AND CONTRACTOR IDENTIFICATION NUMBER**

NOTICE TO ALL BIDDERS:

Section 14835, et. seq. of the California Government Code requires that a five percent preference be given to bidders who qualify as a small business. The rules and regulations of this law, including the definition of a small business for the delivery of service, are contained in Title 2, California Code of Regulations, Section 1896, et. seq. A copy of the regulations is available upon request. Questions regarding the preference approval process should be directed to the Office of Small and Minority Business at (916) 322-5060. To claim the small business preference, you must submit a copy of your certification approval letter with your bid.

Are you claiming preference as a small business?

_____ Yes* X No

*Attach a copy of your certification approval letter.